NEW SOURCE CONSTRUCTION and MINOR SOURCE OPERATING PERMIT OFFICE OF AIR MANAGEMENT

West Fork Land Development Company, L.L.C. 480 North Hall Road, Wheatland, Indiana 47597

(herein known as the Permittee) is hereby authorized to construct and operate subject to the conditions contained herein, the emission units described in Section A (Source Summary) of this permit.

This permit is issued to the above mentioned company under the provisions of 326 IAC 2-1.1, (326 IAC 2-5.1 if new source), 326 IAC 2-6.1 and 40 CFR 52.780, with conditions listed on the attached pages.

Construction Permit No.: MSOP-083-10726-000	041
Issued by:	Issuance Date:
Paul Dubenetzky, Branch Chief Office of Air Management	

Indiana Department of Environmental Management Office of Air Management

Addendum to the

Technical Support Document for New Construction and Minor Source Operation

Source Name: West Fork Land Development Company, L.L.C. Source Location: 480 North Hall Road, Wheatland, Indiana 47597

County: Knox

Construction Permit No.: CP-083-10726-00041

SIC Code: 4911

Permit Reviewer: Nysa L. James

On September 14, 1999, the Office of Air Management (OAM) had a notice published in the Knox County Daily News, Bicknell, Indiana, stating that West Fork Land Development Company, L.L.C. had applied for a construction permit to construct and operate a merchant power plant with dry low NOx control. The notice also stated that OAM proposed to issue a permit for this installation and provided information on how the public could review the proposed permit and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this permit should be issued as proposed.

On October 13, 1999, West Fork Land Development Company, L.L.C. submitted comments on the proposed construction permit. The summary of the comments and corresponding responses are as follows (changes are bolded and crossed out for emphasis):

- Comment 1: Under B.7, item (b), WFLDC requests that this requirement be eliminated, since EPA eliminated this requirement under the NSPS rule cited, effective April 13, 1999. (FR February 12, 1999, 7458-7468)
- Response 1: The Federal Register document, cited above, does not eliminate the general reporting requirements of 40 CFR Part 60.7, but revises the current language. As addressed under OAM's Comment #4, electronic notification was added as an alternative method of submitting the requested information and B.7(a)(2) was removed. This revision can be located on page #7463 of the Federal Register document.
- Comment 2: Under D.1.1, this condition applies to NOx and CO emissions only. Equation (3) refers to PM emissions and CEMs. There is no requirement for CEMs for particulate. Therefore, WFLDC requests that equation (3) be deleted.
- Response 2: Even prior to receiving the source's comments, the OAM has initiated this change. Condition D.1.1(b)(3), is removed from the permit since the limiting pollutants of concern are NOx and CO. Once the above mentioned pollutants are reduced to less than 250 tons per year, the particulate matter emissions are reduced to below 250 tons per year. Therefore, the OAM has decided that placing a specific limit on PM is unnecessary.
- Comment 3: Under D.1.7, paragraph (b) WFLDC requests that the requirement for PM emissions testing of the turbines be eliminated. The annual Potential-to-Emit (PTE) of PM from the turbines is constrained by the limit on annual PTE of NO_x and CO. As indicated on page 3 of the IDEM Technical Support Document accompanying the construction permit, the limited PTE of PM from the turbines is 32.9 tons per year. This is based on the turbine vendor's guarantee. Using EPA's AP-42 emission factor instead of the turbine vendor guarantee results in a limited PTE of PM from the turbines of 105.22 tons per year. This is still well below the 250 tons per year major source level. Therefore, there is no possibility of exceeding 250 tons per year. WFLDC would agree to the use of the AP-42 emission factor for the turbines, with the limit of less than 250 tons per for the sum of PM

Indiana Department of Environmental Management Office of Air Management

Technical Support Document (TSD) for a New Source Construction and Minor Source Operating Permit

Source Background and Description

Source Name: West Fork Land Development Company, L.L.C. **Source Location:** 480 North Hall Road, Wheatland, Indiana 47597

County: Knox SIC Code: 4911

Operation Permit No.: 083-10726-00041 Permit Reviewer: Nysa L. James

The Office of Air Management (OAM) has reviewed an application from the West Fork Land Development Company, L.L.C. relating to the construction and operation of a 540 MW merchant power plant.

New Emission Units and Pollution Control Equipment

- (a) Four (4) natural gas-fired combustion turbines, designated as turbine units EU-01 through EU-04, with an anticipated maximum heat input capacity of 1,351 mmBtu/hr (Lower Heating Value, LHV) per turbine unit, with water-injection for NO_x emissions control and exhaust to four (4) stacks designated as S-001 through S-004.
- (b) One (1) natural gas-fired heater, designated as EU-05, with a maximum heat input capacity of 9 mmBtu/hr and exhausts to a stack designated as S-005.
- (c) One (1) diesel engine, utilized to operate an emergency fire water pump, designated as EU-06, with a maximum heat input capacity of 1.3 mmBtu/hr and exhausts to a stack designated as S-006.

Stack Summary

Stack ID	Operation	Height (feet)	Diameter (feet)	Flow Rate (acfm)	Temperature (°F)
S-001	combustion turbine	55.00	25.62	1,934,403 (ISO)	1003(ISO)
S-002	combustion turbine	55.00	25.62	1,934,403 (ISO)	1003(ISO)
S-003	combustion turbine	55.00	25.62	1,934,403 (ISO)	1003(ISO)
S-004	combustion turbine	55.00	25.62	1,934,403 (ISO)	1003(ISO)
S-005	fuel heater	14.00	2.00	3000	980
S-006	fire-water pump engine	6.00	0.50	2600	980

Recommendation

The staff recommends to the Commissioner that the construction and operation be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An application for the purposes of this review was received on March 11, 1999, with additional information received on May 6, 1999, May 13, 1999, June 29, 1999, July 12, 1999, August 17, 1999 and August 27, 1999.

Emission Calculations

See Appendix A (Emissions Calculation Spreadsheets for the fire pump and hazardous air pollutants) for detailed calculations (three (3) pages).

The Hazardous Air Pollutants (HAPs) emission calculations are based on the AP-42 (Section 3.1 Stationary Gas Turbines, draft 5/98) emission factors for organic and metal HAPs (Appendix A, page 1 of 3).

Emissions for the turbines are based on the site area temperature when operating (for natural gas based on 57 $^{\circ}$ F) and worst case operating conditions (information supplied by the Westinghouse vendor). Compliance shall be demonstrated by use of a continuous emissions monitoring system for CO and NO_x . The vendor emissions rate for PM shall be verified by conducting a performance test.

Fugitive VOC Emission calculations were submitted by the company. These values have been verified and accepted by the Office of Air Management. The worst case total VOC fugitive emissions are equal to 0.057 tons per year.

Potential To Emit of the four (4) Combustion Turbines -

NOx potential to emit - Worst case emissions are based on using natural gas (57 °F and at base load) at all times

- 129.371 pounds of NOx per hour per turbine * 8760 hours per year *
- ton/2000 pounds = 566.64 tons per year per turbine.
- 566.64 tons per year per turbine * 4 (total number of turbines) = **2266.6** tons per year.

CO potential to emit - Worst case emissions are based on using natural gas (57 °F and at 75% load)) at all times.

- 125.578 pounds of CO per hour per turbine * 8760 hours per year *
- ton/2000 pounds = 550.03 tons per year per turbine.
- 550.03 tons per year per turbine * 4 (total number of turbines) = **2200.1** tons per year.

 ${
m SO_2}$ potential to emit - Worst case emissions are based on using natural gas (57 $^{\circ}{
m F}$ and at base load) at all times

- 8.044 pounds of SO₂ per hour per turbine * 8760 hours per year * ton/2000
- pounds = 35.23 tons per year per turbine.
- 35.23 tons per year per turbine * 4 (total number of turbines) = **140.93** tons per year.

VOC potential to emit - Worst case emissions are based on using natural gas (57 °F and at base load) at all times

- 4.678 pounds of VOC per hour per turbine * 8760 hours per year *

- ton/2000 pounds = 20.49 tons per year per turbine.
- 20.49 tons per year per turbine * 4 (total number of turbines) = 81.96
- + 0.057 tons per year = **82.02** tons per year.

PM/PM₁₀ potential to emit - Worst case emissions are based on using natural gas (57 °F and at base load) at all times

- 17.097 pounds of PM/PM₁₀ per hour per turbine * 8760 hours per year
- * ton/2000 pounds = 74.88 tons per year per turbine.
- 74.88 tons per year per turbine * 4 (total number of turbines) = **299.54** tons per year.

Limited Potential to Emit of the combustion turbines, natural gas-fired heater and diesel-fired engine is based on NOx emissions limited to less than 250 tons per year in order to stay below the PSD threshold for NOx. By limiting the NOx emissions to below 250 tons per year, the other PSD pollutants will also be less than 250 tons per year. The following calculations are an example based on worst-case emissions. Actual operating hours may be higher to the extent that actual emissions, as determined by monitoring and record keeping, are kept lower than the worst-case emissions.

- NOx Turbines + heater + engine = (2266.6 tons per year * (962.3 hours per year / 8760 hours per year)) + 3.94 tons per year * (962.3 hours per year / 8760 hours per year) + 30.9 tons per year * (26 hours per year / 8760 hours per year) = **249.51 tons per year**.
- SO2 Turbines + heater + engine = (140.93 tons per year * (962.3 hours per year / 8760 hours per year) + 0.02 tons per year * (962.3 hours per year / 8760 hours per year) + 2.0 tons per year * (26 hours per year / 8760 hours per year) = **15.49 tons per year**.
- CO Turbines + heater + engine = (2200.1 tons per year * (962.3 hours per year / 8760 hours per year)) + 3.31 tons per year * (962.3 hours per year / 8760 hours per year) + 6.7 tons per year * (26 hours per year / 8760 hours per year) = **242.1 tons per year**.
- VOC Turbines + heater + engine = (82.02 tons per year * (962.3 hours per year / 8760 hours per year)) + 0.22 tons per year * (962.3 hours per year / 8760 hours per year) + 2.5 tons per year * (26 hours per year / 8760 hours per year) = **9.04 tons per year**.
- PM/PM₁₀ Turbines + heater + engine = (299.54 tons per year * (962.3 hours per year / 8760 hours per year)) + 0.30 tons per year * (962.3 hours per year / 8760 hours per year) + 2.2 tons per year * (26 hours per year / 8760 hours per year) = **32.94 tons per year**.

The source shall have a limit of 249.0 tons of PM per year and 249.0 tons of CO per year on the combustion turbines. The above PM and CO limits are based off of the NOx limit.

Potential To Emit

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as "the maximum capacity of a stationary source or emissions unit to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA, the department, or the appropriate local air pollution control agency."

Pollutant	Potential To Emit (tons/year)	
PM	302.04	
PM-10	302.04	
SO ₂	142.95	
VOC	84.74	
CO	2210.1	

NO	2301 4
INOX	2001.4

HAP's	Potential To Emit (tons/year)
1,3 Butadiene	0.010
Acetaldehyde	1.86
Acrolein	0.182
Arsenic	0.001
Benzene	3.34
Cadmium	0.020
Chromium (VI)	0.037
Dichlorobenzene	4.73E-05
Ethylbenzene	0.571
Formaldehyde	79.95
Hexane	7.10E-02
Lead	0.381
Manganese	0.038
Mercury	0.010
Napthalene	3.33
NDMA	0.005
NMOR	0.005
Nickel	8.28E-05
PAHs	4.29
Propylene Oxide	0.690
Propylene	1.81E-03
Toluene	0.696
TMA	0.004
Xylene	0.621
TOTAL	96.11

- (a) The potential to emit (as defined in 326 IAC 2-7-1(29)) of PM_{10} , NO_x , CO and SO_2 are equal to or greater than 100 tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7.
- (b) The potential to emit (as defined in 326 IAC 2-7-1(29)) of any single HAP is equal to or greater than ten (10) tons per year and the potential to emit (as defined in 326 IAC 2-7-1(29)) of a combination HAPs is greater than or equal to twenty-five (25) tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7.
- (c) Fugitive Emissions

This type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2, but there is an applicable New Source Performance Standard that was in effect on August 7, 1980, therefore, the volatile organic compound (VOC) emissions are counted toward determination of PSD and Part 70 applicability.

Actual Emissions

No previous emission data has been received from the source.

Limited Potential to Emit

The table below summarizes the total potential to emit, reflecting all limits, of the emission units.

	Limited Potential to Emit (tons/year)						
Process/facility	PM	PM-10	SO ₂	VOC	СО	NO _x	Formald ehyde *
Four (4) Combustion Turbines	249.0	249.0	15.48	9.01	249.0	249.0	8.75
natural gas heater	0.03	0.03	0.003	0.02	0.36	0.43	1.11E- 03
diesel engine	0.006	0.006	0.006	0.007	0.020	0.092	8.27E- 03
Total Emissions	249.04	249.04	15.49	9.04	249.38	249.52	8.76

^{*} Formaldehyde is the worst case HAP pollutant. By limiting NO_x , the highest emitting pollutant from burning natural gas, formaldehyde is limited to the above.

County Attainment Status

The source is located in Knox County.

Pollutant	Status
PM-10	attainment
SO ₂	attainment
NO_2	attainment
Ozone	attainment
СО	attainment
Lead	attainment

- (a) Volatile organic compounds (VOC) and oxides of nitrogen (NOx) are precursors for the formation of ozone. Therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. Knox County has been designated as attainment or unclassifiable for ozone. Therefore, VOC and NOx emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 5221.
- (b) Knox County has been classified as attainment or unclassifiable for SO₂, PM₁₀ and CO. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.

Source Status

New Source PSD Definition (emissions after controls, based on 8,760 hours of operation per year at rated capacity and/ or as otherwise limited):

Pollutant	Emissions (ton/yr)
PM	249.12
PM10	249.12
SO ₂	15.56
VOC	10.55

CO	249.10
NO _x	249.34
1,3 Butadiene	0.001
Acetaldehyde	0.205
Acrolein	0.020
Arsenic	0.0001
Benzene	0.368
Cadmium	0.002
Chromium (VI)	0.003
Dichlorobenzene	1.78E-05
Ethylbenzene	0.063
Formaldehyde	8.75
Hexane	0.028
Lead	0.042
Manganese	0.004
Mercury	0.001
Napthalene	0.368
NDMA	0.001
NMOR	0.001
Nickel	3.12E-05
PAHs	0.473
Propylene Oxide	0.076
Propylene	5.37E-06
Toluene	0.315
TMA	0.0004
Xylene	0.068
Combination HAPs	10.76

(a) This new source is **not** a major stationary source because no attainment pollutant is emitted at a rate of 250 tons per year or greater and it is not in one of the 28 listed source categories. Therefore, pursuant to 326 IAC 2-2, and 40 CFR 52.21, the PSD requirements do not apply.

The source's NO_x and CO limited potential to emit is based on a less than 250 tons per year. Compliance with the limits shall be demonstrated by using a continuos emissions monitoring system on the combustion turbines and calculating worst case emissions from the heater and fire-water pump engine (multiplying the throughput by the appropriate AP-42 emission factor).

The source's PM, PM₁₀, SO₂, VOC and HAPs' limited potential to emit is based on the limited potential to emit of NO_x and CO. Compliance with the PTE limits established on NO_x and CO will demonstrate compliance with the above listed pollutants.

Part 70 Permit Determination

326 IAC 2-7 (Part 70 Permit Program)

This new source is subject to the Part 70 Permit requirements because the potential to emit (PTE) of:

- (a) at least one of the criteria pollutant is greater than or equal to 100 tons per year,
- (b) a single hazardous air pollutant (HAP) is greater than or equal to 10 tons per year, or
- (c) any combination of HAPs is greater than or equal to 25 tons/year.

This new source shall apply for a Part 70 (Title V) operating permit within twelve (12) months after this source becomes subject to Title V.

Federal Rule Applicability

(a) 40 CFR 60, Subpart GG (Stationary Gas Turbines): The four (4) combustion turbines are subject to 40 CFR Part 60, Subpart GG because the heat input at peak load is equal to or greater than 10.7 gigajoules per hour, based on the lower heating value of the fuel fired.

Pursuant to 326 IAC 12-1 and 40 CFR 60, Subpart GG (Stationary Gas Turbines), the Permittee shall:

(1) limit nitrogen oxides emissions, as required by 40 CFR 60.332, to:

STD =
$$0.0075 \frac{(14.4)}{Y} + F$$
,

where STD = allowable NO_x emissions (percent by volume at 15 percent oxygen on a dry basis).

Y = manufacturer's rated heat rate at manufacturer's rated load (kilojoules per watt hour) or, actual measured heat rate based on lower heating value of fuel as measured at actual peck load for the facility. The value of Y shall not exceed 14.4 kilojoules per watt hour.

F = NO_x emission allowance for fuel-bound nitrogen as defined in paragraph (a)(3) of 40 CFR 60.332.

- (2) limit sulfur dioxide emissions, as required by 40 CFR 60.333, to 0.015 percent by volume at 15 percent oxygen on a dry basis, or use natural gas fuel with a sulfur content less than or equal to 0.8 percent by weight;
- install a continuous monitoring system to monitor and record the fuel consumption and the ratio of water to fuel being fired in the turbine, as required by 40 CFR 60.334(a);
- (4) monitor the sulfur content and nitrogen content of the fuel being fired in the turbine, as required by 40 CFR 60.334(b); and
- (5) report periods of excess emissions, as required by 40 CFR 334(c).
- (b) This source is subject to the requirements of 40 CFR Part 72-80 (Acid Rain Program). The requirements of this program shall be detailed in the Acid Rain, Phase II Permit.
- (c) There are no other New Source Performance Standards (326 IAC 12) and 40 CFR Part 60 applicable to this facility.
- (d) There are no NESHAP 40 CFR Part 63 applicable to this facility.

State Rule Applicability

326 IAC 1-6-3 (Preventive Maintenance):

- (a) The Permittee shall prepare and maintain Preventive Maintenance Plans (PMP) within ninety (90) days after issuance of this permit, including the following information on each:
 - (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission units;
 - (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions:
 - (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

- (b) The Permittee shall implement the Preventive Maintenance Plans as necessary to ensure that lack of proper maintenance does not cause or contribute to a violation of any limitation on emissions or potential to emit.
- (c) PMP's shall be submitted to IDEM and OAM upon request and shall be subject to review and approval by IDEM and OAM.

326 IAC 1-7 (Stack Height Provisions):

Stacks designated as S-001 through S-004 are subject to the requirements of 326 IAC 1-7 (Stack Height Provisions) because the potential emissions which exhaust through the above mentioned stacks, are greater than 25 tons per year of PM . This rule requires that the stack be constructed using Good Engineering Practice (GEP), unless field studies or other methods of modeling show to the satisfaction of IDEM that no excessive ground level concentrations, due to less than adequate stack height, will result.

326 IAC 2-1-3.4 (New Source Toxics Control):

The formaldehyde potential to emit shall be less than ten (10) tons per twelve (12) consecutive month period, rolled on a monthly basis. The combination of HAPs shall be less than twenty-five (25) tons per twelve (12) consecutive month period, rolled on a monthly basis. Therefore, the requirements of 326 IAC 2-1-3.4 (New Source Toxics Control) does not apply. Since NOx is the limiting pollutant of this source, the NOx limit established in the permit is sufficient to demonstrate compliance with the formaldehyde limit.

326 IAC 2-2 (Prevention of Significant Deterioration):

- (a) The potential to emit of PM, CO and NOx from the four (4) combustion turbines, one (1) natural gas heater and one(1) diesel engine shall be limited to less than 250 tons per twelve (12) consecutive months per pollutant, rolled on a monthly basis. Therefore, the Prevention of Significant Deterioration (PSD) rules, 326 IAC 2-2 and 40 CFR 52.21, will not apply.
- (b) The emissions shall be limited by the following equations:
 - (1) NOx emissions (tons per year) =

 Emissions from combustion turbines
 (tons per year, based on CEMs data) +
 natural gas usage from heater
 (MMCF/yr) * AP-42 emission factor from
 Tables 1.4-1 through 1.4-2 + diesel fuel
 usage from engine (gals/yr) * AP-42
 emission factor from Tables 3.3-1.
 - (2) CO emissions (tons per year) =

 Emissions from combustion turbines
 (tons per year, based on CEMs data) +
 natural gas usage from heater
 (MMCF/yr) * AP-42 emission factor from
 Tables 1.4-1 through 1.4-2 + diesel fuel
 usage from engine (gals/yr) * AP-42
 emission factor from Tables 3.3-1.
 - (3) PM emissions (tons per year) = Emissions from combustion turbines (tons per year, based on CEMs data) + natural gas usage from heater (MMCF/yr) * AP-42 emission factor from Tables 1.4-1 through 1.4-4 + diesel fuel usage from engine (gals/yr) * AP-42 emission factor from Tables 3.3-1 through 3.3-2.
- (b) The source shall be required to install a continuous emissions monitoring system in

accordance with 326 IAC 3-5, to demonstrate compliance with the above mentioned NOx and CO limits. In periods of downtime, compliance shall be demonstrated by using EPA's AP-42 Emission Factors, tables 3.1-2 and 3.1-3 or by an approved alternative method as described under Condition D.1.10 in the construction permit. Emissions shall be calculated by multiplying the heat input capacity or throughput, times the appropriate emission factor.

(c) If the Permittee ever elects to relax the potential to emit limitation such that the PSD rules apply, the Permittee would be required, at a minimum, to install a control which would meet the value considered BACT at this time or install add-on controls which would meet the BACT value. For example, the Permittee is installing turbines that have been guaranteed by the vendor to meet a NOx emission rate of 25 ppm, but permits for similar units have recently been permitted with BACT set at 9 ppm. Therefore, at a minimum, the Permittee would be required to meet the most current BACT value.

326 IAC 2-6 (Emission Reporting):

This source is subject to 326 IAC 2-6 (Emission Reporting), because it has the potential to emit more than one hundred (100) tons per year of NO_x , SO_2 , CO and PM_{10} . Pursuant to this rule, the owner/operator of the source must annually submit an emission statement for the source. The annual statement must be received by July 1 of each year and contain the minimum requirement as specified in 326 IAC 2-6-4. The submittal should cover the period defined in 326 IAC 2-6-2(8)(Emission Statement Operating Year).

326 IAC 3-5 (Continuous Monitoring of Emissions):

- (a) Pursuant to 326 IAC 3-5-1(d)(1), the owner or operator of a new source with an emission limitation or permit requirement established under 326 IAC 2-1-3(i)(8) shall be required to install, calibrate, certify, operate and maintain a continuous monitoring system for measuring NO_x and CO emissions rates in pounds per hour from stacks S-001 through S-004 in accordance with 326 IAC 3-5-2 and 326 IAC 3-5-3.
- (b) The Permittee shall submit to IDEM, OAM, within ninety (90) days after monitor installation, a complete written continuous monitoring standard operating procedure (SOP), in accordance with the requirements of 326 IAC 3-5-4.
- (c) The Permittee shall record the output of the system and shall perform the required record keeping, pursuant to 326 IAC 3-5-6, and reporting, pursuant to 326 IAC 3-5-7.
- (d) In instances of downtime, the source shall use EPA's AP-42 emission factors to demonstrate compliance with the limits established in this construction permit.
- (e) After commencement of operation, the source may submit to OAM alternative worst case emission factors and their corresponding temperatures to use in lieu of the AP-42 emission factors in instances of downtime. The alternative emissions factors must be approved by OAM prior to use in calculating emissions for the limitations established in this construction permit. The alternative emission factors shall be based upon collected monitoring and test data supplied from an approved continuous emission monitoring system and/or approved performance tests. In the event that the information submitted does not contain sufficient data to establish appropriate emission factors, the source shall continue to collect data until appropriate emission factors can be established. During this period of time, the source shall continue to use AP-42 emission factors in periods of downtime.

This condition shall determine continuous compliance with the NO_x and CO emission limits established in this permit to avoid 326 IAC 2-2.

326 IAC 5-1 (Visible Emissions Limitations):

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Exemptions), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of forty percent (40%) any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings) as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

326 IAC 6-2 does not apply to the turbines, heater, and fire-water pump engine because the units are not utilized for indirect heating.

No other 326 IAC 6 rules apply.

326 IAC 7-1 (Sulfur Dioxide Emission Limitations):

Pursuant to 326 IAC 7-1.1-1, the source is subject to this article, but there is not a specific fuel limit for natural gas.

326 IAC 8-1-6 (New facilities; general reduction requirements):

Pursuant to 326 IAC 8-1-6 (New facilities; general reduction requirements), the requirements of BACT shall not apply because potential to emit of VOC of each turbine is less than 25 tons per year per unit.

No other 326 IAC 8 rules apply.

326 IAC 9 (Carbon Monoxide Emission Limits):

Pursuant to 326 IAC 9 (Carbon Monoxide Emission Limits), the source is subject to this rule because it is a stationary source which emits CO emissions and commenced operation after March 21, 1972. Under this rule, there is not a specific emission limit because the source is not an operation listed under 326 IAC 9-1-2.

326 IAC 10 (Nitrogen Oxides) does not apply to the source because it is not located in the specified counties (Clark and Floyd) listed under 326 IAC 10-1-1.

Air Toxic Emissions

Indiana presently requests applicants to provide information on emissions of the 189 hazardous air pollutants (HAPs) set out in the Clean Air Act Amendments of 1990. These pollutants are either carcinogenic or otherwise considered toxic and are commonly used by industries. They are listed as air toxics on the Office of Air Management (OAM) Construction Permit Application Form Y.

- (a) This source will emit levels of air toxics less than those which constitute a major source according to Section 112 of the 1990 Clean Air Act Amendments.
- (b) See attached calculations for detailed air toxic calculations. (Appendix A, page 1 of 3)

Conclusion

The construction and operation of this merchant power plant shall be subject to the conditions of the attached proposed New Source Construction and Minor Source Operating Permit 083-10726-00041.

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emissions.

- Response 3: Even prior to receiving the source's comments, the OAM has initiated this change. Condition D.1.7(b), Testing Requirements for PM, is removed from the permit. NOx and CO are the limiting pollutants of concern in this permit. By limiting NOx and CO emissions, the PM emissions are limited below the 250 tons per year limit specified under Condition D.1.1. Condition D.1.7(a) requires stack testing for NOx and CO. By verifying compliance with the CO and NOx limits, compliance is also established for PM.
- Comment 4: Under D.1.8, paragraph (b), the requirement for monitoring nitrogen content of natural gas was eliminated by EPA in 1987. EPA determined that pipeline quality natural gas does not contain fuel-bound nitrogen. (Memo from John Rasnik, Chief of EPA Compliance Monitoring Branch to Regional Compliance Branch Chiefs, August 14, 1987). Since only natural gas will be used in the turbines, WFLDC requests that the requirement for nitrogen monitoring of the fuel be eliminated.
- Response 4: The memo referred to above does not eliminate the monitoring requirements of 40 CFR Part 60.334, Monitoring of Operations. The memo states that a source may request a custom schedule to allow for a less stringent monitoring requirement than what is specified in 40 CFR Part 60.334. Such custom schedule must be submitted to the OAM and the USEPA, in a detailed manner, outlining the new monitoring schedule. After a review of the custom schedule, then the OAM and the USEPA will determine whether the submitted custom schedule is acceptable. Once approved, the custom schedule will be incorporated into the operating permit. The OAM does acknowledge that the language allowing for a custom schedule was not included in the draft permit. Therefore, Condition D.1.8 is revised as follows (changes are bolded and crossed out for emphasis):
 - D.1.8 40 CFR Part 60, Subpart GG Compliance Requirements (Stationary Gas Turbines)

Pursuant to 40 CFR Part 60, Subpart GG (Stationary Gas Turbines), the Permittee shall:

- install a continuous monitoring system to monitor and record the fuel consumption and the ratio of water to fuel being fired in the turbine, as required by 40 CFR 60.334(a);
- (b) monitor the sulfur content and nitrogen content of the fuel being fired in the turbine, as required by 40 CFR 60.334(b).
- (c) and report periods of excess emissions, as required by 40 CFR 334(c).
- (d) Owners, operators or fuel vendors may develop custom schedules for determination of the nitrogen and sulfur content based on the design and operation of the affected facility and the characteristics of the fuel supply. These custom schedules shall be substantiated with data and must be approved by the Administrator and IDEM before they can be used to comply with the above requirements.
- Comment 5: Under D.1.9, paragraph (d) WFLDC would prefer to use the NO_x missing data substitution procedures specified in 40 CFR Part 75 Subpart D. WFLDC is required to use this method under the NO_x monitoring and reporting requirements of 40 CFR Part 75 Subpart D. The NO_x substitution method specified in the draft permit would be redundant and require additional record-keeping and reporting to achieve the same

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result. Use of AP-42 factors for CO is acceptable since we are aware of no conflicting EPA requirements for data substitution during CO CEMS downtime.

Response 5: The OAM has determined that the use of the NOx substitution procedures under 40 CFR Part 75, Subpart D is an acceptable alternative to the use of current AP-42 emission factors. The NOx substitution procedures outlined in 40 CFR Part 75, Subpart D utilize worst case previously recorded continuos emissions monitoring data in periods of the system's downtime. Therefore, Condition D.1.9, Continuos Emission Monitoring Systems, is revised as follows (changes are bolded and crossed out for emphasis):

D.1.9 Continuous Emission Monitoring System (CEMS) [326 IAC 3-5]

- (a) Pursuant to 326 IAC 3-5-1(d)(1), the owner or operator of a new source with an emission limitation or permit requirement established under 326 IAC 2-1-3(i)(8) shall be required to install, calibrate, certify, operate and maintain a continuous monitoring system for measuring NO_x and CO emissions rates in pounds per hour from stacks 1-4 in accordance with 326 IAC 3-5-2 and 326 IAC 3-5-3. The continuous monitoring system will determine compliance with the NO_x and CO emission limits established in Condition D.1.1.
- (b) The Permittee shall submit to IDEM, OAM, within ninety (90) days after monitor installation, a complete written continuous monitoring standard operating procedure (SOP), in accordance with the requirements of 326 IAC 3-5-4.
- (c) To document compliance with Condition D.1.1, the Permittee shall record the output of the system and shall perform the required record keeping, pursuant to 326 IAC 3-5-6, and reporting, pursuant to 326 IAC 3-5-7.
- (d) In instances of downtime, the source shall use EPA's AP-42 emission factors, tables 3.1-2 and 3.1-3, to demonstrate compliance with the CO and NOx limits established in Condition D.1.1 and use the Missing Data Substitution Procedures outlined in 40 CFR Part 75, Subpart D to demonstrate compliance with the NOx limit, established under Condition D.1.1.
- (e) After operation at worst case conditions (based on 57 °F, base load for NOx and 75% load for CO), the source may submit to OAM alternative emission factors and their corresponding temperatures to use in lieu of the AP-42 emission factors in instances of downtime. The alternative emissions factors must be approved by OAM prior to use in calculating emissions for the limitations established in this construction permit. The alternative emission factors shall be based upon collected monitoring and test data supplied from an approved continuous emission monitoring system and/or approved performance tests. In the event that the information submitted does not contain sufficient data to establish appropriate emission factors, the source shall continue to collect data until appropriate emission factors can be established. During this period of time, the source shall continue to use AP-42 emission factors in periods of downtime.
- Comment 6: Under D.1.9, paragraph (e), for the reasons stated in comment number 5, WFLDC requests the last sentence be changed to read: "During this period of time, the source

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shall continue to use Ap-42 emission factors for CO and the NO_x missing data substitution procedures specified in 40 CFR Part 75 Subpart D in periods of CEMS downtime.

- Response 6: Condition D.1.9(e) is revised as follows (changes are bolded and crossed out for emphasis):
 - (e) After operation at worst case conditions (based on 57 °F, base load for NOx and 75% load for CO), the source may submit to OAM alternative emission factors and their corresponding temperatures to use in lieu of the AP-42 emission factors in instances of downtime. The alternative emissions factors must be approved by OAM prior to use in calculating emissions for the limitations established in this construction permit. The alternative emission factors shall be based upon collected monitoring and test data supplied from an approved continuous emission monitoring system and/or approved performance tests. In the event that the information submitted does not contain sufficient data to establish appropriate emission factors, the source shall continue to collect data until appropriate emission factors can be established. During this period of time, the source shall continue to use AP-42 emission factors for CO and the NOx Missing Data Substitution Procedures specified in 40 CFR Part 75, Subpart D, in periods of downtime.
- Comment 7: Under D.1.10 (c), delete "and nitrogen content", per comment number 4 above.
- Response 8: This requirement shall remain until a custom schedule has been approved to use in lieu of the standard requirements of 40 CFR Part 60, Subpart GG.
- Comment 8: On page 1, under stack summary, note that the diameter for the turbine stacks is a circular equivalent for the rectangular stack exit.
- Response 8: The OAM does acknowledge that the diameter of the stacks listed on page 1 of 11 of the Technical Support Document (TSD), is a circular equivalent for the regular stack exit. However, the Office of Air Management (OAM) corrects permit errors in the form of a technical support addendum. The original technical support document does not change from the first proposal in order to maintain the integrity of the review process. The technical support document is utilized as a technical tool that allows the source to understand OAM's decision in a more detailed manner. This document is not an enforceable document, but an aid to the source's permit.
- Comment 9: On page 2, under Emission Calculations, in paragraph 3, WFLDC requests that the requirement for PM emissions testing of the turbines be eliminated. As discussed in comment number 3 on the construction permit, the annual Potential-to-Emit (PTE) of PM from the turbines is constrained by the limit on annual PTE of NO_x and CO. As indicated on page 3 of the Technical Support Document, the limited PTE of PM from the turbines is 32.9 tons per year. This is based on the turbine vendor's guarantee. Using EPA's AP-42 emission factor instead of the turbine vendor guarantee results in a limited PTE of PM from the turbines of 105.22 tons per year. This is still well below the 250 tons per year major source level. Therefore, there is no possibility of exceeding 250 tons per year. WFLDC would agree to the use of the AP-42 emission factor for the turbines, with the limit of less than 250 tons per year for the sum of PM emissions.
- Response 9: The OAM has removed the permit condition that requires stack testing for PM (Condition D.1.7(b)). As stated above under Response #8, the OAM does not make changes to the Technical Support Document, but does so in the addendum and permit.

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- Comment 10: On page 7, item (a)(4), strike "and nitrogen content". See comment number 4 on the construction permit.
- Response 10: For reasons stated in Response #4, this requirement shall remain in the permit.
- Comment 11: On page 8, item 326 IAC 2-2, the corresponding construction permit condition D.1.1 applies to NOx and CO emissions only. Also, there is no requirement for CEMs for particulate in either the construction permit or the technical support document. Equation (b)(3) refers to PM emissions and CEMs. Therefore, WFDLC requests that either the reference to PM emissions and equation (3) be deleted, or "CEMS data" in equation (3) be replaced with "AP-42 emission factor".
- Response 11: Condition D.1.1(b)(3) has been removed from the permit under Response #2. However, as stated above, the TSD shall remain unchanged.
- Comment 12: On page 8, item 326 IAC 2-2(b), per comment number 6 on the construction permit, WFLDC requests that the second sentence be changed to read: "In periods of CEMS downtime, NO_x compliance shall be demonstrated using NO_x missing data substitution procedures specified in 40 CFR Part 75 Subpart D. For CO, values in EPA's AP-42 Emission Factors tables 3.1-2 shall be used. CO emissions shall be calculated by multiplying the heat input capacity or throughput, times the appropriate emissions factor. An approved alternative method may be substituted for the above, as described under Condition D.1.9 in the construction permit.
- Response 12: Condition D.1.9 has been revised above under Response #5. However, as stated in Response #8, the TSD shall remain unchanged.
- Comment 13: On page 9, item 326 IAC 2-2 (c), WFLDC requests this paragraph be replaced with language from the actual applicable federal regulatory citation that pertains to relaxation of PTE limits. In 40 CFR 52.21(r) (4); "if the Permittee elects to relax the potential to emit limitation such that the facility becomes a major source under PSD, then the PSD rules, 40 CFR 52.21 paragraphs (j) through (s) shall apply to the facility as though construction had not yet commenced on the facility." BACT under the cited rule would be determined on a case-by-case basis. Current BACT values would be considered as part of the case-by-case BACT determination required under 40 CFR 52.21. The regulation prohibits the presumption of a "minimum" BACT, as implied by the example cited in this paragraph.
- Response 13: As stated in Response #8, the OAM does not make changes to the TSD. However, the OAM does acknowledge that BACT is determined on a case-by-case basis. The OAM also believes, based on the current permit application, that this source would be required to have the best controlled turbines, unless the source could demonstrate why such is not technically or economically feasible. The OAM wants to ensure that any future modifications or changes do not circumvent PSD review, as stated in the New Source Review Manual (page A.9). The TSD addresses only an example and not a presumptive BACT.
- Comment 14: On page 9, item 326 IAC 3-5(d), per comment number 4 above, WFLDC requests this paragraph be changed to "In periods of CEMS downtime, NO_x compliance shall be demonstrated using NO_x missing data substitution procedures specified in 40 CFR Part 75 Subpart D. For CO, values in EPA's AP-42 Emission Factors tables 3.1-2 shall be used. CO emissions shall be calculated by multiplying the heat input capacity or throughput, times the appropriate emissions factor. An approved alternative method may be substituted for the above, as described under paragraph (e) below.

West Fork Land Development Company, L.L.C Wheatland, Indiana

Reviewer: NLJ

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Response 14: Condition D.1.9(e) has been revised above under Response #6. However, as stated in Response #8, the TSD shall remain unchanged.

Upon further review, OAM has made the following changes (changes are bolded and crossed out for emphasis:

1. The title of the permit, located on page 1 of 23, is revised as follows to reflect the current permit title based on the revised 326 IAC 2 rules (changes are bolded and crossed out for emphasis):

NEW SOURCE CONSTRUCTION and MINOR SOURCE OPERATING PERMIT OFFICE OF AIR MANAGEMENT

- 2. The identification number title, located on page 1 of 23, is revised from CP to MSOP.
- 3. Condition B.5, Modification to Permit, should not reference B.7. It has been revised to the following so that the specific condition number is not referenced (changes are bolded and crossed out for emphasis):
 - B.5 Modification to Permit [326 IAC 2]

Notwithstanding Condition B.7 the Section B condition entitled "Minor Source Operating Permit", all requirements and conditions of this construction permit shall remain in effect unless modified in a manner consistent with procedures established for modifications of construction permits pursuant to 326 IAC 2 (Permit Review Rules).

- 4. Condition B.6, Minor Source Operating Permit, is revised as follows to clarify when the affidavit should be submitted (changes are bolded and crossed out for emphasis):
 - B.6 Minor Source Operating Permit [326 IAC 2-6.1] This document shall also become a minor source operating permit pursuant to 326 IAC
 - 2-6.1 when, prior to start of operation, the following requirements are met:
 - (a) The attached Affidavit of Construction shall be submitted to the Office of Air Management (OAM), Permit Administration & Development Section., verifying that the emissions units were constructed as proposed in the application. The emissions units covered in the New Source Construction Permit may begin operating on the date the affidavit of construction is postmarked or hand delivered to IDEM.
 - (1) If the Affidavit of Construction verifies that the facilities covered in this Construction Permit were constructed as proposed in the application, then the facilities may begin operating on the date the Affidavit of Construction is postmarked or hand delivered to IDEM.
 - (2) If the Affidavit of Construction does not verify that the facilities covered in this Construction Permit were constructed as proposed in the application, then the Permittee shall receive an Operation Permit Validation Letter from the Chief of the Permit Administration & Development Section prior to beginning operation of the facilities.
 - If construction is completed in phases; i.e., the entire construction is not done (b) continuously, a separate affidavit must be submitted for each phase of construction. Any permit conditions associated with operation start up dates such as stack testing for New Source Performance Standards (NSPS) shall be applicable to each individual

phase.

- (c) **Upon receipt of the** The Permittee shall receive an Operation Permit Validation Letter from the Chief of the Permit Administration & Development Section, the Permittee shall and attach it to this document.
- (d) The operation permit will be subject to annual operating permit fees pursuant to 326 IAC 2-7-19 (Fees).
- (e) Pursuant to 326 IAC 2-7-4(a)(1)(A)(ii) and 326 IAC 2-5.1-4, the Permittee shall apply for a Title V operating permit within twelve (12) months of the date on which the source first meets an applicability criterion of 326 IAC 2-7-2. after the source becomes subject to Title V. This 12-month period starts at the postmarked submission date of the Affidavit of Construction. If the construction is completed in phases, the 12-month period starts at the postmarked submission date of the Affidavit of Construction that triggers the Title V applicability. The operation permit issued shall contain as a minimum the conditions in Section C and Section D of this permit.
- 5. Condition B.7, NSPS Reporting, is revised as follows to reflect the changes made by EPA in the Federal Register dated February 12, 1999 page 7463 (effective April 13, 1999)(changes are bolded and crossed out for emphasis):
 - B.7 NSPS Reporting Requirement

Pursuant to the New Source Performance Standards (NSPS), Part 60.7, Subpart GG the source owner/operator is hereby advised of the requirement to report the following at the appropriate times Any owner or operator shall furnish the Administrator and IDEM written notification or, if acceptable to both the Administrator and IDEM and the owner or operator of a source, electronic notification, as follows:

- (a) Commencement of construction date (no later than 30 days after such date);
- (b) Anticipated start-up date (not more than 60 days or less than 30 days prior to such date);
- (eb) Actual start-up date (within 15 days after such date); and
- (dc) Date of performance testing (at least 30 days prior to such date), when required by a condition elsewhere in this permit.

Reports are to be sent to:

Indiana Department of Environmental Management Compliance Data Section, Office of Air Management 100 North Senate Avenue, P. O. Box 6015 Indianapolis, IN 46206-6015

The application and enforcement of these standards have been delegated to the IDEM-OAM. The requirements of 40 CFR Part 60 are also federally enforceable.

6. Condition C.2, Preventive Maintenance, is revised as follows to be more consistent with 326 IAC 1-6-3 (Preventive Maintenance Plans)(changes are bolded and crossed out for emphasis):

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C.2 Preventive Maintenance Plan [326 IAC 1-6-3]

- (a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMP) within ninety (90) days—after issuance of this permit, including the following information on each emissions unit:
 - (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
 - (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions;
 - (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

If due to circumstances beyond its control, the PMP cannot be prepared and maintained within the above time frame, the Permittee may extend the date an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

- (b) The Permittee shall implement the Preventive Maintenance Plans as necessary to ensure that lack of proper maintenance failure to implement the Preventive Maintenance Plan does not cause or contribute to a violation of any limitation on emissions or potential to emit.
- (c) PMP's shall be submitted to IDEM, OAM, upon request and shall be subject to review and approval by IDEM, OAM. **IDEM, OAM, may require the Permittee** to revise its Preventive Maintenance Plan whenever lack of proper maintenance causes or contributes to any violation.
- 7. Condition C.3, Permit Revision, is revised to strike out the brackets around the rule cite in paragraph C.3(a).
- 8. Condition C.5, Inspection and Entry, is revised as follows in order to clarify confidentiality. The OAM also determined that subpart (1) and (2) of paragraph (e) were unnecessary, therefore they have been deleted. The revision is as follows (changes are bolded and crossed out for emphasis):

C.5 Inspection and Entry [326 IAC 2-7-6(2)]

Upon presentation of proper identification cards, credentials, and other documents as may be required by law, and subject to the Permittee's right under all applicable laws and regulations to assert that the information collected by the agency is confidential and entitled to be treated as such, the Permittee shall allow IDEM, OAM, U.S. EPA, or an authorized representative to perform the following:

- Enter upon the Permittee's premises where a Part 70 source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
- (b) Have access to and copy, at reasonable times, any records that must be kept

under the conditions of this permit;

- (c) Inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;
- (d) Sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and
- (e) Utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.
- (1) The Permittee may assert a claim that, in the opinion of the Permittee, information removed or about to be removed from the source by IDEM, OAM, or an authorized representative, contains information that is confidential under IC 5-14-3-4(a). The claim shall be made in writing before or at the time the information is removed from the source. In the event that a claim of confidentiality is so asserted, neither IDEM, OAM, (nor an authorized representative, may disclose the information unless and until IDEM, OAM, makes a determination under 326 IAC 17-1-7 through 326 IAC 17-1-9 that the information is not entitled to confidential treatment and that determination becomes final. [IC 5-14-3-4; IC 13-14-11-3; 326 IAC 17-1-7 through 326 IAC 17-1-9]
- (2) The Permittee, and IDEM, OAM, acknowledge that the federal law applies to claims of confidentiality made by the Permittee with regard to information removed or about to be removed from the source by U.S. EPA. [40 CFR Part 2, Subpart B].
- 9. Condition C.8, Opacity, is revised as follows to correctly reflect the rule language (changes are bolded and crossed out for emphasis):

C.8 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Exemptions Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.
- 10. Condition C.11, Performance Testing, is revised as follows to specify the locations of applicable procedures and analysis methods for performance testing (changes are bolded and crossed out for emphasis):

C.11 Performance Testing [326 IAC 3-6][326 IAC 2-1.1-11]

(a) Compliance testing on new emissions units shall be conducted within 60 days after achieving maximum production rate, but no later than 180 days after initial start-up, if specified in Section D of this approval. All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling

Procedures), except as provided elsewhere in this permit, utilizing methods any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM, OAM.

A test protocol, except as provided elsewhere in this permit, shall be submitted to:

Indiana Department of Environmental Management Compliance Data Section, Office of Air Management 100 North Senate Avenue, P. O. Box 6015 Indianapolis, Indiana 46206-6015

no later than thirty-five (35) days prior to the intended test date. The Permittee shall submit a notice of the actual test date to the above address so that it is received at least two weeks prior to the test date.

(b) All test reports must be received by IDEM, OAM within forty-five (45) days after the completion of the testing. An extension may be granted by the Commissioner IDEM, OAM, if the source submits to IDEM, OAM, a reasonable written explanation within five (5) days prior to the end of the initial forty-five (45) day period.

The documentation submitted by the Pe4rmittee Permittee does not require certification by the "authorized individual" as defined by 326 IAC 2-1.1-1.

- 11. Condition C.12, Compliance Monitoring, is revised as follows to reflect the monitoring for new construction sources and not existing sources (changes are bolded and crossed out for emphasis):
 - C.12 Compliance Monitoring [326 IAC 2-1.1-11] [40 CFR PART 75.4]

Compliance with applicable requirements shall be documented as required by this permit. The Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment, not later than ninety (90) days after the units commence commercial operation.

- 12. Condition C.14, Monitoring Method, is revised as follows to clarify that the monitoring and testing requirement are located in Section D of the permit (changes are bolded and crossed out for emphasis):
 - C.14 Monitoring Methods [326 IAC 3]

Any monitoring or testing **required by Section D** performed to meet the applicable requirements of this permit shall be performed according to the provisions of 326 IAC 3, 40 CFR 60, Appendix A, or other approved methods as specified in this permit.

- 13. The last sentence of Condition C.15 (d) is deleted because 326 IAC 2-7-16 is not applicable to the MSOP and becomes applicable once the Title V permit is issued. The revision is as follows (changes are bolded and crossed out for emphasis):
 - (d) Records shall be kept of all instances in which the compliance related information was not met and of all response steps taken. In the event of an emergency, the provisions of 326 IAC 2-7-16 (Emergency Provisions) requiring prompt corrective action to mitigate emissions shall prevail.

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14. Condition C.20, General Record Keeping Requirements, is revised as follows to match Condition C.2 (changes are bolded and crossed out for emphasis):

C.20 General Record Keeping Requirements [326 IAC 2-6.1-2]

- (c) Support information shall include, where applicable:
 - (1) Copies of all reports required by this permit;
 - (2) All original strip chart recordings for continuous monitoring instrumentation:
 - (3) All calibration and maintenance records;
 - (4) Records of preventive maintenance shall be sufficient to demonstrate that improper maintenance failure to implement the Preventive

 Maintenance Plan did not cause or contribute to a violation of any limitation on emissions or potential to emit. To be relied upon subsequent to any such violation, these records may include, but are not limited to: work orders, parts inventories, and operator's standard operating procedures. Records of response steps taken shall indicate whether the response steps were performed in accordance with the Compliance Response Plan required by Section C Compliance Monitoring Plan Failure to take Response Steps, of this permit, and whether a deviation from a permit condition was reported. All records shall briefly describe what maintenance and response steps were taken and indicate who performed the tasks.
- (d) All record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance when operation begins.
- 15. Condition C.21 (e), General Reporting Requirements, is revised as follows, because MSOPs do not have Section B Deviations from Permit Requirements Conditions and Emergency/ Deviation Occurrence Reports and becomes applicable once the Title V permit is issued (changes are bolded and crossed out for emphasis):
 - C.21 General Reporting Requirements [326 IAC 2-1.1-11] [326 IAC 2-6.1-2] [IC 13-14-1-13]
 - (e) All instances of deviations as described in Section B- Deviations from Permit Requirements Conditions must be clearly identified in such reports. The Emergency/Deviation Occurrence Report does not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1). A reportable deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit or a rule. It does not include:
 - (1) An excursion from compliance monitoring parameters as identified in Section D of this permit unless tied to an applicable rule or limit; or
 - (2) A malfunction as described in 326 IAC 1-6-2; or
 - (3) Failure to implement elements of the Preventive Maintenance Plan unless lack of maintenance has caused or contributed to a deviation.

(4) Failure to make or record information required by the compliance monitoring provisions of Section D unless such failure exceeds 5% of the required data in any calendar quarter.

A Permittee's failure to take the appropriate response step when an excursion of a compliance monitoring parameter has occurred or failure to monitor or record the required compliance monitoring is a deviation.

16. MSOP sources are required to submit annual notification; this condition was left out of the original permit model. Also, a form has been added; see the last page of this permit. Condition C.22, Annual Notification, is added as follows (changes are bolded and crossed out for emphasis):

C.22 Annual Notification [326 IAC 2-6.1-5(a)(5)]

- (a) Annual notification shall be submitted to the Office of Air Management stating whether or not the source is in operation and in compliance with the terms and conditions contained in this permit.
- (b) Noncompliance with any condition must be specifically identified. If there are any permit conditions or requirements for which the source is not in compliance at any time during the year, the Permittee must provide a narrative description of how the source did or will achieve compliance and the date compliance was, or will be, achieved. The notification must be signed by an authorized individual.
- (c) The annual notice shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted in the format attached no later than March 1 of each year to:

Compliance Data Section, Office of Air Management Indiana Department of Environmental Management 100 North Senate Avenue, P.O. Box 6015 Indianapolis, IN 46206-6015

- (d) The notification shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAM, on or before the date it is due.
- 17. Section D.1 (c), Facility Description, is revised as follows to reflect the stack number the diesel engine exhausts through (changes are bolded and crossed out for emphasis):
 - (c) One (1) diesel engine, utilized to operate an emergency fire water pump, designated as EU-06, with a maximum heat input capacity of 1.3 mmBtu/hr and exhausts to a stack designated as S-006.
- 18. Condition D.1.4 shall cite 326 IAC 7-1.1 instead of 326 IAC 7-1. This revision is necessary to reflect the correct rule cite.
- 19. The total number of pages is revised fro 23 to 25 due to the addition of the MSOP annual notification form, located on page 25.

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SECTION A SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Management (OAM). The information describing the source contained in conditions A.1 through A.3 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

A.1 General Information [326 IAC 2-5.10-3(c)] [326 IAC 2-6.1-4(a)]

The Permittee owns and operates a merchant power plant.

Responsible Official: Michael J. Miller

Source Address: 480 North Hall Road, Wheatland, Indiana 47597

Mailing Address: 1400 Smith Street, Houston, Texas 77002

SIC Code: 4911 County Location: Knox

County Status: Attainment for all criteria pollutants

Source Status: Part 70 Permit Program

Minor Source, under PSD Rules

A.2 Emission Units and Pollution Control Equipment Summary

This construction permit consists of the following emission units and pollution control devices:

- (a) Four (4) natural gas-fired combustion turbines, designated as turbine units EU-01 through EU-04, with an anticipated maximum heat input capacity of 1,351 mmBtu/hr (Lower Heating Value, LHV) per turbine unit, with water-injection for NO_x emissions control and exhaust to four (4) stacks designated as S-001 through S-004.
- (b) One (1) natural gas-fired heater, designated as EU-05, with a maximum heat input capacity of 9 mmBtu/hr and exhausts to a stack designated as S-005.
- (c) One (1) diesel engine, utilized to operate an emergency fire water pump, designated as EU-06, with a maximum heat input capacity of 1.3 mmBtu/hr and exhausts to a stack designated as S-006.

A.3 Part 70 Permit Applicability [326 IAC 2-7-2]

This stationary source will be required to have a Part 70 permit by 326 IAC 2-7-2 (Applicability) because:

- (a) It is a major source, as defined in 326 IAC 2-7-1(22).
- (b) This new source shall apply for a Part 70 (Title V) operating permit within twelve (12) months after this source becomes subject to Title V.

A.4 Acid Rain Permit Applicability [326 IAC 2-7-2]

This stationary source shall be required to have a Phase II, Acid Rain permit by 40 CFR Part 72.30 (Applicability) because:

- (a) The combustion turbines are new units under 40 CR Part 72.6.
- (b) The source cannot operate the combustion units until their Phase II, Acid Rain permit has been issued.

SECTION B GENERAL CONSTRUCTION CONDITIONS

40 CFR 52.780, WITH CONDITIONS LISTED BELOW.

B.1 Permit No Defense [IC 13]

This permit to construct does not relieve the Permittee of the responsibility to comply with the provisions of the Indiana Environmental Management Law (IC 13-11 through 13-20; 13-22 through 13-25; and 13-30), the Air Pollution Control Law (IC 13-17) and the rules promulgated thereunder, as well as other applicable local, state, and federal requirements.

B 2 Definitions

Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, any applicable definitions found in IC 13-11, 326 IAC 1-2, and 326 IAC 2-1.1-1 shall prevail.

B.3 Effective Date of the Permit [IC13-15-5-3]

Pursuant to IC 13-15-5-3, this permit becomes effective upon its issuance.

B.4 Revocation of Permits [326 IAC 2-1.1-9(5)]

Pursuant to 326 IAC 2-1.1-9(5)(Revocation of Permits), the Commissioner may revoke this permit if construction is not commenced within eighteen (18) months after receipt of this approval or if construction is suspended for a continuous period of one (1) year or more.

B.5 Modification to Permit [326 IAC 2]

Notwithstanding the Section B condition entitled "Minor Source Operating Permit", all requirements and conditions of this construction permit shall remain in effect unless modified in a manner consistent with procedures established for modifications of construction permits pursuant to 326 IAC 2 (Permit Review Rules).

B.6 Minor Source Operating Permit [326 IAC 2-6.1]

This document shall also become a minor source operating permit pursuant to 326 IAC 2-6.1 when, prior to start of operation, the following requirements are met:

- (a) The attached Affidavit of Construction shall be submitted to the Office of Air Management (OAM), Permit Administration & Development Section.
 - (1) If the Affidavit of Construction verifies that the facilities covered in this Construction Permit were constructed as proposed in the application, then the facilities may begin operating on the date the Affidavit of Construction is postmarked or hand delivered to IDEM.
 - (2) If the Affidavit of Construction does not verify that the facilities covered in this Construction Permit were constructed as proposed in the application, then the Permittee shall receive an Operation Permit Validation Letter from the Chief of the Permit Administration & Development Section prior to beginning operation of the facilities.
- (b) If construction is completed in phases; i.e., the entire construction is not done continuously, a separate affidavit must be submitted for each phase of construction. Any permit conditions associated with operation start up dates such as stack testing for New Source Performance Standards (NSPS) shall be applicable to each individual phase.
- (c) Upon receipt of the Operation Permit Validation Letter from the Chief of the Permit Administration & Development Section, the Permittee shall attach it to this document.
- (d) The operation permit will be subject to annual operating permit fees pursuant to

326 IAC 2-7-19 (Fees).

(e) Pursuant to 326 IAC 2-7-4(a)(1)(A)(ii) and 326 IAC 2-5.1-4, the Permittee shall apply for a Title V operating permit within twelve (12) months of the date on which the source first meets an applicability criterion of 326 IAC 2-7-2.

B.7 NSPS Reporting Requirement

Pursuant to the New Source Performance Standards (NSPS), Part 60.7, Any owner or operator shall furnish the Administrator and IDEM written notification or, if acceptable to both the Administrator and the owner or operator of a source, electronic notification, as follows:

- (a) Commencement of construction date (no later than 30 days after such date);
- (b) Actual start-up date (within 15 days after such date); and
- (c) Date of performance testing (at least 30 days prior to such date), when required by a condition elsewhere in this permit.

Reports are to be sent to:

Indiana Department of Environmental Management Compliance Data Section, Office of Air Management 100 North Senate Avenue, P. O. Box 6015 Indianapolis, IN 46206-6015

The application and enforcement of these standards have been delegated to the IDEM-OAM. The requirements of 40 CFR Part 60 are also federally enforceable.

SECTION C

SOURCE OPERATION CONDITIONS

Entire Source

C.1 PSD Minor Source Status [326 IAC 2-2] [40 CFR 52.21]

- (a) The potential to emit of nitrogen oxides (NOx), carbon monoxide (CO) and Particulate Matter (PM) for the facilities listed in this construction permit, are greater than 250 tons per year. The potential to emit, of the above listed pollutants, is limited to less than 250 tons per year, therefore the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) and 40 CFR 52.21 will not apply.
- (b) Any change or modification which may increase the potential to emit to the following:
 - 1.) 25 tons per year or more (326 IAC 2-1),
 - 2.) 10 tons per year or more for a single HAP or combination HAPs greater than 25 tons per year or more (326 IAC 2-1-3.4),
 - 3.) 250 tons per year or more (326 IAC 2-2),

from the equipment covered in this construction permit must be approved by the Office of Air Management (OAM) before such change may occur.

C.2 Preventive Maintenance Plan [326 IAC 1-6-3]

- (a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMP) after issuance of this permit, including the following information on each emissions unit:
 - (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
 - (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions;
 - (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.
- (b) The Permittee shall implement the Preventive Maintenance Plans as necessary to ensure that failure to implement the Preventive Maintenance Plan does not cause or contribute to a violation of any limitation on emissions or potential to emit.
- (c) PMP's shall be submitted to IDEM, OAM, upon request and shall be subject to review and approval by IDEM, OAM. IDEM, OAM, may require the Permittee to revise its Preventive Maintenance Plan whenever lack of proper maintenance causes or contributes to any violation.

C.3 Permit Revision [326 IAC 2-5.1-3(e)(3)] [326 IAC 2-6.1-6]

- (a) The Permittee must comply with the requirements of 326 IAC 2-6.1-6 whenever the Permittee seeks to amend or modify this permit.
- (b) Any application requesting an amendment or modification of this permit shall be submitted to:

Indiana Department of Environmental Management Permits Branch, Office of Air Management 100 North Senate Avenue, P.O. Box 6015 Indianapolis, Indiana 46206-6015 West Fork Land Development Company, L.L.C.

Wheatland, Indiana

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Any such application should be certified by the "authorized individual" as defined by 326 IAC 2-1.1-1.

(c) The Permittee shall notify the OAM within thirty (30) calendar days of implementing a notice-only change. [326 IAC 2-6.1-6(d)]

C 4 Source Modification [326 IAC 2-7-10 5]

- (a) The Permittee must comply with the requirements of [326 IAC 2-7-10.5] whenever the Permittee seeks to construct new emissions units, modify existing emissions units, or otherwise modify the source.
- (b) Any application requesting an amendment or modification of this permit shall be submitted to:

Indiana Department of Environmental Management Permits Branch, Office of Air Management 100 North Senate Avenue, P.O. Box 6015 Indianapolis, Indiana 46206-6015

Any such application should be certified by the "responsible official" as defined by 326 IAC 2-7-1(34) only if a certification is required by the terms of the applicable rule.

C.5 Inspection and Entry [326 IAC 2-5.1-3(e)(4)(B)] [326 IAC 2-6.1-5(a)(4)]

Upon presentation of proper identification cards, credentials, and other documents as may be required by law, and subject to the Permittee's right under all applicable laws and regulations to assert that the information collected by the agency is confidential and entitled to be treated as such, the Permittee shall allow IDEM, OAM, U.S. EPA, or an authorized representative to perform the following:

- (a) Enter upon the Permittee's premises where a Part 70 source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
- (b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- (c) Inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;
- (d) Sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and
- (e) Utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.

C.6 Transfer of Ownership or Operation [326 IAC 2-6.1-6(d)(3)]

Pursuant to [326 IAC 2-6.1-6(d)(3)]:

- (a) In the event that ownership of this source is changed, the Permittee shall notify IDEM, OAM, Permits Branch, within thirty (30) days of the change.
- (b) The written notification shall be sufficient to transfer the permit to the new owner by an notice-only change pursuant to 326 IAC 2-6.1-6(d)(3).
- (c) IDEM, OAM, shall issue a revised permit.

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The notification which shall be submitted by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1.

C.7 Permit Revocation [326 IAC 2-1-9]

Pursuant to 326 IAC 2-1-9(a)(Revocation of Permits), this permit to construct and operate may be revoked for any of the following causes:

- (a) Violation of any conditions of this permit.
- (b) Failure to disclose all the relevant facts, or misrepresentation in obtaining this permit.
- (c) Changes in regulatory requirements that mandate either a temporary or permanent reduction of discharge of contaminants. However, the amendment of appropriate sections of this permit shall not require revocation of this permit.
- (d) Noncompliance with orders issued pursuant to 326 IAC 1-5 (Episode Alert Levels) to reduce emissions during an air pollution episode.
- (e) For any cause which establishes in the judgment of IDEM, the fact that continuance of this permit is not consistent with purposes of this article.

C.8 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

C.9 Fugitive Dust Emissions [326 IAC 6-4]

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions). 326 IAC 6-4-2(4) is not federally enforceable.

C.10 Stack Height [326 IAC 1-7]

The Permittee shall comply with the applicable provisions of 326 IAC 1-7 (Stack Height Provisions), for all exhaust stacks through which a potential (before controls) of twenty-five (25) tons per year or more of particulate matter or sulfur dioxide is emitted by using ambient air quality modeling pursuant to 326 IAC 1-7-4.

Testing Requirements

C.11 Performance Testing [326 IAC 3-6]

(a) Compliance testing on new emissions units shall be conducted within 60 days after achieving maximum production rate, but no later than 180 days after initial start-up, if specified in Section D of this approval. All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM, OAM.

A test protocol, except as provided elsewhere in this permit, shall be submitted to:

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Indiana Department of Environmental Management Compliance Data Section, Office of Air Management 100 North Senate Avenue, P. O. Box 6015 Indianapolis, Indiana 46206-6015

no later than thirty-five (35) days prior to the intended test date. The Permittee shall submit a notice of the actual test date to the above address so that it is received at least two weeks prior to the test date.

(b) All test reports must be received by IDEM, OAM within forty-five (45) days after the completion of the testing. An extension may be granted by the IDEM, OAM, if the source submits to IDEM, OAM, a reasonable written explanation within five (5) days prior to the end of the initial forty-five (45) day period.

The documentation submitted by the Permittee does not require certification by the "authorized individual" as defined by 326 IAC 2-1.1-1.

Compliance Monitoring Requirements

C.12 Compliance Monitoring [326 IAC 2-1.1-11] [40 CFR PART 75.4]

Compliance with applicable requirements shall be documented as required by this permit.

C.13 Maintenance of Monitoring Equipment [IC 13-14-1-13]

- (a) In the event that a breakdown of the monitoring equipment occurs, a record shall be made of the times and reasons of the breakdown and efforts made to correct the problem. To the extent practicable, supplemental or intermittent monitoring of the parameter should be implemented at intervals no less frequent than required in Section D of this permit until such time as the monitoring equipment is back in operation. In the case of continuous monitoring, supplemental or intermittent monitoring of the parameter should be implemented at intervals no less than one (1) hour until such time as the continuous monitor is back in operation.
- (b) The Permittee shall install, calibrate, quality assure, maintain, and operate all necessary monitors and related equipment. In addition, prompt corrective action shall be initiated whenever indicated.

C.14 Monitoring Methods [326 IAC 3]

Any monitoring or testing required by Section D of this permit shall be performed according to the provisions of 326 IAC 3, 40 CFR 60, Appendix A, or other approved methods as specified in this permit.

C.15 Compliance Monitoring Plan - Failure to Take Response Steps [326 IAC 1-6]

- (a) The Permittee is required to implement a compliance monitoring plan to ensure that reasonable information is available to evaluate its continuous compliance with applicable requirements. This compliance monitoring plan is comprised of:
 - (1) This condition;
 - (2) The Compliance Determination Requirements in Section D of this permit;
 - (3) The Compliance Monitoring Requirements in Section D of this permit;

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- (4) The Record Keeping and Reporting Requirements in Section C (Monitoring Data Availability, General Record Keeping Requirements, and General Reporting Requirements) and in Section D of this permit; and
- (5) A Compliance Response Plan (CRP) for each compliance monitoring condition of this permit. CRP's shall be submitted to IDEM, OAM upon request and shall be subject to review and approval by IDEM, OAM. The CRP shall be prepared within ninety (90) days after issuance of this permit by the Permittee and maintained on site, and is comprised of:
 - (A) Response steps that will be implemented in the event that compliance related information indicates that a response step is needed pursuant to the requirements of Section D of this permit; and
 - (B) A time schedule for taking such response steps including a schedule for devising additional response steps for situations that may not have been predicted.
- (b) For each compliance monitoring condition of this permit, appropriate response steps shall be taken when indicated by the provisions of that compliance monitoring condition. Failure to perform the actions detailed in the compliance monitoring conditions or failure to take the response steps within the time prescribed in the Compliance Response Plan, shall constitute a violation of the permit unless taking the response steps set forth in the Compliance Response Plan would be unreasonable.
- (c) After investigating the reason for the excursion, the Permittee is excused from taking further response steps for any of the following reasons:
 - (1) The monitoring equipment malfunctioned, giving a false reading. This shall be an excuse from taking further response steps providing that prompt action was taken to correct the monitoring equipment.
 - (2) The Permittee has determined that the compliance monitoring parameters established in the permit conditions are technically inappropriate, has previously submitted a request for an administrative amendment to the permit, and such request has not been denied or;
 - (3) An automatic measurement was taken when the process was not operating; or
 - (4) The process has already returned to operating within "normal" parameters and no response steps are required.
- (d) Records shall be kept of all instances in which the compliance related information was not met and of all response steps taken.

C.16 Actions Related to Noncompliance Demonstrated by a Stack Test

(a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate corrective actions. The Permittee shall submit a description of these corrective actions to IDEM, OAM, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize emissions from the affected emissions unit while the corrective actions are being implemented. IDEM, OAM shall notify the Permittee within thirty (30) days, if the corrective actions taken are deficient. The Permittee shall submit a description of additional corrective actions taken to IDEM, OAM within thirty (30) days of receipt of the notice of deficiency. IDEM, OAM reserves the authority to use enforcement activities to resolve noncompliant stack tests.

(b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAM that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAM may extend the retesting deadline. Failure of the second test to demonstrate compliance with the appropriate permit conditions may be grounds for immediate revocation of the permit to operate the affected emissions unit.

The documents submitted pursuant to this condition do not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1.

Record Keeping and Reporting Requirements

C.17 Malfunctions Report [326 IAC 1-6-2]

Pursuant to 326 IAC 1-6-2 (Records; Notice of Malfunction):

- (a) A record of all malfunctions, including startups or shutdowns of any facility or emission control equipment, which result in violations of applicable air pollution control regulations or applicable emission limitations shall be kept and retained for a period of three (3) years and shall be made available to the Indiana Department of Environmental Management (IDEM), Office of Air Management (OAM) or appointed representative upon request.
- (b) When a malfunction of any facility or emission control equipment occurs which lasts more than one (1) hour, said condition shall be reported to OAM, using the Malfunction Report Forms (2 pages). Notification shall be made by telephone or facsimile, as soon as practicable, but in no event later than four (4) daytime business hours after the beginning of said occurrence.
- (c) Failure to report a malfunction of any emission control equipment shall constitute a violation of 326 IAC 1-6, and any other applicable rules. Information of the scope and expected duration of the malfunction shall be provided, including the items specified in 326 IAC 1-6-2(a)(1) through (6).
- (d) Malfunction is defined as any sudden, unavoidable failure of any air pollution control equipment, process, or combustion or process equipment to operate in a normal and usual manner. [326 IAC 1-2-39]

C.18 Annual Emission Statement [326 IAC 2-6]

- (a) The Permittee shall submit an annual emission statement certified pursuant to the requirements of 326 IAC 2-6, that must be received by July 1 of each year and must comply with the minimum requirements specified in 326 IAC 2-6-4. The annual emission statement shall meet the following requirements:
 - (1) Indicate actual emissions of criteria pollutants from the source, in compliance with 326 IAC 2-6 (Emission Reporting);
 - (2) Indicate actual emissions of other regulated pollutants from the source, for purposes of Part 70 fee assessment.
- (b) The annual emission statement covers the twelve (12) consecutive month time period starting January 1 and ending December 31. The annual emission statement must be submitted to:

Indiana Department of Environmental Management Technical Support and Modeling Section, Office of Air Management 100 North Senate Avenue, P. O. Box 6015 Indianapolis, Indiana 46206-6015

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(c) The annual emission statement required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAM, on or before the date it is due.

The submittal by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1.

C.19 Monitoring Data Availability [326 IAC 2-6.1-2] [IC 13-14-1-13]

- (a) With the exception of performance tests conducted in accordance with Section C-Performance Testing, all observations, sampling, maintenance procedures, and record keeping, required as a condition of this permit shall be performed at all times the equipment is operating at normal representative conditions.
- (b) As an alternative to the observations, sampling, maintenance procedures, and record keeping of subsection (a) above, when the equipment listed in Section D of this permit is not operating, the Permittee shall either record the fact that the equipment is shut down or perform the observations, sampling, maintenance procedures, and record keeping that would otherwise be required by this permit.
- (c) If the equipment is operating but abnormal conditions prevail, additional observations and sampling should be taken with a record made of the nature of the abnormality.
- (d) If for reasons beyond its control, the operator fails to make required observations, sampling, maintenance procedures, or record keeping, reasons for this must be recorded.
- (e) At its discretion, IDEM may excuse such failure providing adequate justification is documented and such failures do not exceed five percent (5%) of the operating time in any guarter.
- (f) Temporary, unscheduled unavailability of staff qualified to perform the required observations, sampling, maintenance procedures, or record keeping shall be considered a valid reason for failure to perform the requirements stated in (a) above.

C.20 General Record Keeping Requirements [326 IAC 2-6.1-2]

- (a) Records of all required monitoring data and support information shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be kept at the source location for a minimum of three (3) years and available upon the request of an IDEM, OAM, representative. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a written request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.
- (b) Records of required monitoring information shall include, where applicable:
 - (1) The date, place, and time of sampling or measurements;
 - (2) The dates analyses were performed;
 - (3) The company or entity performing the analyses;
 - (4) The analytic techniques or methods used;
 - (5) The results of such analyses; and
 - (6) The operating conditions existing at the time of sampling or measurement.

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- (c) Support information shall include, where applicable:
 - (1) Copies of all reports required by this permit;
 - (2) All original strip chart recordings for continuous monitoring instrumentation;
 - (3) All calibration and maintenance records;
 - (4) Records of preventive maintenance shall be sufficient to demonstrate that failure to implement the Preventive Maintenance Plan did not cause or contribute to a violation of any limitation on emissions or potential to emit. To be relied upon subsequent to any such violation, these records may include, but are not limited to: work orders, parts inventories, and operator's standard operating procedures. Records of response steps taken shall indicate whether the response steps were performed in accordance with the Compliance Response Plan required by Section C Compliance Monitoring Plan Failure to take Response Steps, of this permit, and whether a deviation from a permit condition was reported. All records shall briefly describe what maintenance and response steps were taken and indicate who performed the tasks.
- (d) All record keeping requirements not already legally required shall be implemented when operation begins.

C.21 General Reporting Requirements [326 IAC 2-1.1-11] [326 IAC 2-6.1-2] [IC 13-14-1-13]

- (a) To affirm that the source has met all the compliance monitoring requirements stated in this permit the source shall submit a Quarterly. Compliance Monitoring Report. Any deviation from the requirements and the date(s) of each deviation must be reported. The Compliance Monitoring Report shall include the certification by the "authorized individual" as defined by 326 IAC2-1.1-1(1).
- (b) The report required in (a) of this condition and reports required by conditions in Section D of this permit shall be submitted to:
 - Indiana Department of Environmental Management Compliance Data Section, Office of Air Management 100 North Senate Avenue, P. O. Box 6015 Indianapolis, Indiana 46206-6015
- (c) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAM, on or before the date it is due.
- (d) Unless otherwise specified in this permit, any quarterly report shall be submitted within thirty (30) days of the end of the reporting period. The reports do not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (e) All instances of deviations must be clearly identified in such reports. A reportable deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit or a rule. It does not include:
 - (1) An excursion from compliance monitoring parameters as identified in Section D of this permit unless tied to an applicable rule or limit; or
 - (2) A malfunction as described in 326 IAC 1-6-2; or

- (3) Failure to implement elements of the Preventive Maintenance Plan unless lack of maintenance has caused or contributed to a deviation.
- (4) Failure to make or record information required by the compliance monitoring provisions of Section D unless such failure exceeds 5% of the required data in any calendar quarter.

A Permittee's failure to take the appropriate response step when an excursion of a compliance monitoring parameter has occurred or failure to monitor or record the required compliance monitoring is a deviation.

- (f) Any corrective actions or response steps taken as a result of each deviation must be clearly identified in such reports.
- (g) The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period.

C.22 Annual Notification [326 IAC 2-6.1-5(a)(5)]

- (a) Annual notification shall be submitted to the Office of Air Management stating whether or not the source is in operation and in compliance with the terms and conditions contained in this permit.
- (b) Noncompliance with any condition must be specifically identified. If there are any permit conditions or requirements for which the source is not in compliance at any time during the year, the Permittee must provide a narrative description of how the source did or will achieve compliance and the date compliance was, or will be, achieved. The notification must be signed by an authorized individual.
- (c) The annual notice shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted in the format attached no later than March 1 of each year to:

Compliance Data Section, Office of Air Management Indiana Department of Environmental Management 100 North Senate Avenue, P.O. Box 6015 Indianapolis, IN 46206-6015

(d) The notification shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAM, on or before the date it is due.

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SECTION D.1

FACILITY CONDITIONS

- (a) Four (4) natural gas-fired combustion turbines, designated as turbine units EU-01 through EU-04, with an anticipated maximum heat input capacity of 1,351 mmBtu/hr (Lower Heating Value, LHV) per turbine unit, with water-injection for NO_x emissions control and exhaust to four(4) stacks designated as S-001 through S-004.
- (b) One (1) natural gas-fired heater, designated as EU-05, with a maximum heat input capacity of 9 mmBtu/hr and exhausts to a stack designated as S-005.
- (c) One (1) diesel engine, utilized to operate an emergency fire water pump, designated as EU-06, with a maximum heat input capacity of 1.3 mmBtu/hr and exhausts to a stack designated as S-006.

The information describing the source contained in this Section D.1 is descriptive information, and does not constitute federally enforceable conditions.

Emissions Limitation and Standards

D.1.1 NOx and CO Limitations [326 IAC 2-2]

- (a) The potential to emit of CO and NOx from the four (4) combustion turbines, one (1) natural gas heater and one(1) diesel engine shall be limited to less than 250 tons per twelve (12) consecutive months per pollutant, rolled on a monthly basis. Therefore, the Prevention of Significant Deterioration (PSD) rules, 326 IAC 2-2 and 40 CFR 52.21, will not apply.
- (b) The emissions shall be limited by the following equations:
 - (1) NOx emissions (tons per year) =

Emissions from combustion turbines (tons per year, based on CEMs data) + natural gas usage from heater (MMCF/yr) * AP-42 emission factors from Tables 1.4-1 through 1.4-2 + diesel fuel usage from engine (gals/yr) *

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AP-42 emission factors from Tables 3.3-1.

(2) CO emissions (tons per year) =

Emissions from combustion turbines (tons per year, based on CEMs data) + natural gas usage from heater (MMCF/yr) * AP-42 emission factors from Tables 1.4-1 through 1.4-2 + diesel fuel usage from engine (gals/yr) * AP-42 emission factors from Tables 3.3-1. 2 emission factors from Tables 3.3-1 through 3.3-2.

D.1.2 40 CFR Part 60, Subpart GG Applicability (Stationary Gas Turbines)

- (a) The four (4) combustion turbines are subject to 40 CFR Part 60, Subpart GG because the heat input at peak load is equal to or greater than 10.7 gigajoules per hour, based on the lower heating value of the fuel fired.
- (b) Pursuant to 326 IAC 12-1 and 40 CFR 60, Subpart GG (Stationary Gas Turbines), the Permittee shall:
 - (1) limit nitrogen oxides emissions, as required by 40 CFR 60.332, to:

where $STD = allowable NO_x$ emissions (percent by volume at 15 percent oxygen on a dry basis).

- Y = manufacturer's rated heat rate at manufacturer's rated load (kilojoules per watt hour) or, actual measured heat rate based on lower heating value of fuel as measured at actual peck load for the facility. The value of Y shall not exceed 14.4 kilojoules per watt hour.
 - $F = NO_x$ emission allowance for fuel-bound nitrogen as defined in paragraph (a)(3) of 40 CFR 60.332.
- (2) limit sulfur dioxide emissions, as required by 40 CFR 60.333, to 0.015 percent by volume at 15 percent oxygen on a dry basis, or use natural gas fuel with a sulfur content less than or equal to 0.8 percent by weight;
- (3) limit sulfur dioxide emissions, as required by 40 CFR 60.333, to 0.015 percent by volume at 15 percent oxygen on a dry basis, or use natural gas fuel with a sulfur content less than or equal to 0.8 percent by weight.

D.1.3 326 IAC 2-1-3.4 (New Source Toxics Control)

- (a) The formaldehyde potential to emit shall be less than ten (10) tons per twelve consecutive months period, rolled on a monthly basis. Therefore, the requirements of 326 IAC 2-1-3.4 (New Source Toxics Rule) does not apply.
- (b) The combination of Hazardous Air Pollutants shall be less than twenty-five (25) tons per twelve consecutive months period, rolled on a monthly basis. Therefore, the requirements of 326 IAC 2-1-3.4 (New Source Toxics Control) does not apply.

D.1.4 326 IAC 7-1.1 (Sulfur Dioxide Emission Limitations)

The four (4) combustion turbines are subject to 326 IAC 7-1 because each unit has a potential to emit 25 tons of SO_2 per year. There are no applicable SO_2 emission limits, under this state rule, established for the type of fuel used.

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D.1.5 Carbon Monoxide Emission Limitations [326 IAC 9-1]

This source is subject to 326 IAC 9-1 because it is a stationary source of CO emissions commencing operation after March 21, 1972. There are no applicable CO emission limits, under this state rule, established for this type of operation.

D.1.6 Preventive Maintenance Plan [326 IAC 1-6-3]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this facility and its control device.

Compliance Determination Requirements

D.1.7 Testing Requirements

- (a) Pursuant to 326 IAC 3-5, the Permittee shall conduct a performance test, within one-hundred and eighty (180) days after operation commences, on the combustion turbines' exhaust stacks (designated as S-001 through S-004) in order to certify the continuous emission monitoring system for NOx and CO.
- (b) IDEM may require compliance testing at any specific time when necessary to determine if the source is in compliance. If testing is required by IDEM, compliance with the NOx and CO limits specified in Condition D.1.1, shall be determined by a performance test conducted in accordance with Section C Performance Testing.

Compliance Monitoring Requirements

D.1.8 40 CFR Part 60, Subpart GG Compliance Requirements (Stationary Gas Turbines)

Pursuant to 40 CFR Part 60, Subpart GG (Stationary Gas Turbines), the Permittee shall:

- (a) install a continuous monitoring system to monitor and record the fuel consumption and the ratio of water to fuel being fired in the turbine, as required by 40 CFR 60.334(a);
- (b) monitor the sulfur content and nitrogen content of the fuel being fired in the turbine, as required by 40 CFR 60.334(b).
- (c) and report periods of excess emissions, as required by 40 CFR 334(c).
- (d) Owners, operators or fuel vendors may develop custom schedules for determination of the nitrogen and sulfur content based on the design and operation of the affected facility and the characteristics of the fuel supply. These custom schedules shall be substantiated with data and must be approved by the Administrator and IDEM before they can be used to comply with the above requirements.

D.1.9 Continuous Emission Monitoring System (CEMS) [326 IAC 3-5]

(a) Pursuant to 326 IAC 3-5-1(d)(1), the owner or operator of a new source with an emission limitation or permit requirement established under 326 IAC 2-1-3(i)(8) shall be required to install, calibrate, certify, operate and maintain a continuous monitoring system for measuring NO_x and CO emissions rates in pounds per hour from stacks 1-4 in accordance with 326 IAC 3-5-2 and 326 IAC 3-5-3. The continuous monitoring system will determine compliance with the NO_x and CO emission limits established in Condition D.1.1.

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- (b) The Permittee shall submit to IDEM, OAM, within ninety (90) days after monitor installation, a complete written continuous monitoring standard operating procedure (SOP), in accordance with the requirements of 326 IAC 3-5-4.
- (c) To document compliance with Condition D.1.1, the Permittee shall record the output of the system and shall perform the required record keeping, pursuant to 326 IAC 3-5-6, and reporting, pursuant to 326 IAC 3-5-7.
- (d) In instances of downtime, the source shall use EPA's AP-42 emission factors, table 3.1-2, to demonstrate compliance with the CO and use the Missing Data Substitution Procedures outlined in 40 CFR Part 75, Subpart D to demonstrate compliance with the NOx limit, established under Condition D.1.1.
- (e) After operation at worst case conditions (based on 57 °F and 75% load for CO), the source may submit to OAM alternative emission factors and their corresponding temperatures to use in lieu of the AP-42 emission factors in instances of downtime. The alternative emissions factors must be approved by OAM prior to use in calculating emissions for the limitations established in this construction permit. The alternative emission factors shall be based upon collected monitoring and test data supplied from an approved continuous emission monitoring system and/or approved performance tests. In the event that the information submitted does not contain sufficient data to establish appropriate emission factors, the source shall continue to collect data until appropriate emission factors can be established. During this period of time, the source shall continue to use AP-42 emission factors for CO and the NOx Missing Data Substitution Procedures specified in 40 CFR Part 75, Subpart D, in periods of downtime.

Record Keeping and Reporting Requirements [326 IAC 2-1-3]

D.1.10 Record Keeping Requirements

- (a) To document compliance with Condition D.1.1, the Permittee shall maintain records required under 326 IAC 3-5-6 at the source in a manner so that they may be inspected by the IDEM, OAM, or the U.S. EPA., if so requested or required.
- (b) To document compliance with Condition D.1.1, the Permittee shall maintain records of the following:
 - (1) amounts of fuel combusted during each month for each unit (in SCF for heater and in gallons for diesel engine); and
 - (2) the heat input capacity of each unit.
- (c) To document compliance with D.1.2, the source shall maintain records of the natural gas analyses, including the sulfur and nitrogen content of the gas, for a period of three (3) years.
- (d) All records shall be maintained in accordance with Section C General Record Keeping Requirements, of this permit.

D.1.11 Reporting Requirements

(a) The Permittee shall submit a quarterly excess emissions report, if applicable, based on the continuous emissions monitor (CEM) data for NO_x and CO, pursuant to 326 IAC 3-5-7. These reports shall be submitted within thirty (30) calendar days following the end of each calendar quarter and in accordance with condition C.21 - General Reporting Requirements of this permit.

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(b) A quarterly summary of the information to document compliance with Condition D.1.1 and D.1.2 shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported.

MALFUNCTION REPORT

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR MANAGEMENT FAX NUMBER - 317 233-5967

This form should only be used to and to qualify for	report malfunction the exemption un			<u>1-6</u>
THIS FACILITY MEETS THE APPLICABILITY REQU PARTICULATES ?, 100 LBS/HR VOC ? OTHER POLLUTANT ? EMISSIONS FROM M CAUSED EMISSIONS IN EXCESS OF APPLICABLE	, 100 LBS/HR SULFU IALFUNCTIONING CO	R DIOXIDE ? CONTROL EQUIPMENT	R 2000 LBS/H	R OF ANY
THIS MALFUNCTION RESULTED IN A VIOLATION PERMIT LIMIT OF	OF: 326 IAC	OR, PERMIT COND	ITION #	AND/OR
THIS INCIDENT MEETS THE DEFINITION OF 'MAL	FUNCTION' AS LIST	ED ON REVERSE SII	DE? Y	N
THIS MALFUNCTION IS OR WILL BE LONGER THA	AN THE ONE (1) HOL	JR REPORTING REQ	UIREMENT?	Y N
COMPANY:_West Fork Land Development Company,	L.L.C. PHONE NO.	(713)853-4205		
LOCATION: Wheatland/Knox PERMIT NO083-10726_AFS PLANT ID:083-00 CONTROL/PROCESS DEVICE WHICH MALFUNCTION	041_AFS POINT ID: _ ONED AND REASON	I	INSP:	
DATE/TIME MALFUNCTION STARTED:/	19			_ AM / PM
ESTIMATED HOURS OF OPERATION WITH MALFUN	CTION CONDITION:_			
DATE/TIME CONTROL EQUIPMENT BACK-IN				
TYPE OF POLLUTANTS EMITTED: TSP, PM-1				
ESTIMATED AMOUNT OF POLLUTANT MITTED MEASURES TAKEN TO MINIMIZE EMISSIONS:				
REASONS WHY FACILITY CANNOT BE SHUTD				
CONTINUED OPERATION REQUIRED TO PROVIDE EXCONTINUED OPERATION NECESSARY TO PREVENT	INJURY TO PERSON	S:		
CONTINUED OPERATION NECESSARY TO PREVENT INTERIM CONTROL MEASURES: (IF APPLICABLE)	SEVERE DAMAGE T	O EQUIPMENT:		
MALFUNCTION REPORTED BY:		TITLE:		
	RE IF FAXED)			
MALFUNCTION RECORDED BY:	DATI	E:	TIME:_	

Please note - This form should only be used to report malfunctions applicable to Rule 326 IAC 1-6 and to qualify for the exemption under 326 IAC 1-6-4.

326 IAC 1-6-1 Applicability of rule

Sec. 1. The requirements of this rule (326 IAC 1-6) shall apply to the owner or operator of any facility which has the potential to emit twenty-five (25) pounds per hour of particulates, one hundred (100) pounds per hour of volatile organic compounds or SO2, or two thousand (2,000) pounds per hour of any other pollutant; or to the owner or operator of any facility with emission control equipment which suffers a malfunction that causes emissions in excess of the applicable limitation.

326 IAC 1-2-39 "Malfunction" definition

If this item is checked on the front, please explain rationale:

Sec. 39. Any sudden, unavoidable failure of any air pollution control equipment, process, or combustion or process equipment to operate in a normal and usual manner. (Air Pollution Control Board; 326 IAC 1-2-39; filed Mar 10, 1988, 1:20 p.m.: 11 IR 2373)

*Essential services are interpreted to mean those operations, such as, the providing of electricity by power plants. Continued operation solely for the economic benefit of the owner or operator shall not be sufficient reason why a facility cannot be shutdown during a control equipment shutdown.

Phone:

Indiana Department of Environmental Management Office of Air Management Compliance Data Section

Compliance Data Section								
Quarterly Report								
Company Name: Location: Permit No.: Source: Pollutant: Limit:	West Fork Land Development Company, L.L.C. 480 North Hall Road, Wheatland, Indiana 47597 083-10726-00041 Four (4) combustion turbines (1,351 mmBtu/hr per turbine), one (1) natural gas-fired heater and one (1) diesel-fired engine CO Less than 250 tons per twelve (12) consecutive month period Year:							
Month	CO Emissions (tons/ month)		Total CO Emissions for previous eleven months (tons/ month)	Total CO Emissions for twelve month period (tons)				
	Four (4) turbines	One (1) heater	One (1) fire- water pump engine					
1								
2								
3								
9 No deviation occurred in this quarter. 9 Deviation/s occurred in this quarter. Deviation has been reported on: Submitted by: Title / Position: Signature: Date:								

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Indiana Department of Environmental Management Office of Air Management Compliance Data Section

			Quarterly	Report		
Company Name: Location: Permit No.: Source: Pollutant: Limit:	West Fork Land Development Company, L.L.C. 480 North Hall Road, Wheatland, Indiana 47597 083-10726-00041 Four (4) combustion turbines (1,351 mmBtu/hr per turbine), one (1) natural gas-fired heater and one (1) diesel-fired engine NOx Less than 250 tons per twelve (12) consecutive month period Year:					
Month	NOx Emissions (tons/ month)			Total NOx Emissions for previous eleven months (tons/month)	Total NOx Emissions for twelve month period (tons)	
	Four (4) turbines	One (1) heater	One (1) fire- water pump engine			
1						
2						
3						
9 No deviation occurred in this quarter. 9 Deviation/s occurred in this quarter. Deviation has been reported on: Submitted by: Title / Position: Signature: Date: Phone:						

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INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR MANAGEMENT COMPLIANCE DATA SECTION

MINOR SOURCE OPERATING PERMIT ANNUAL NOTIFICATION

This form should be used to comply with the notification requirements under 326 IAC 2-6.1-5(a)(5).

Company Name:	West Fork Land Development Company, L	.L.C.
Address:	480 North Hall Road	
City:	Wheatland	
Phone #:	(713)-853-4205	
MSOP #:	083-10726-00041	
hereby certify that We	est Fork Land Development Company, L.L.C. is	9 still in operation.9 no longer in operation.
hereby certify that We	est Fork Land Development Company, L.L.C. is	 9 in compliance with the requirement of MSOP 083-10726-00041. 9 not in compliance with the requirements of MSOP 083-10726-00041.
Authorized Individu	al (typed):	
Title:		
Signature:		
Date:		
	ions or requirements for which the source is not source did or will achieve compliance and the d	
Noncompliance:		

HAPs Emissions for natural gas-fired turbines

Company Name: West Fork Land Development, L.L.C

Address, City IN Zip: County Road South East 700 South, Wheatland, Indiana 47597

CP: 083-10726
Plt ID: 083-00041
Reviewer: NLJ

Date: 09/01/99

Four (4) combustion turbines @ 1,359 mmBtu/hr each

Heat Input Capacity: 5436 MMBtu/hr

Pollutant	Emission Factor (lbs/MMBtu)	Total Emissions (tons/yr)	Emissions Per Turbine (tons/yr)	Total Limited Emissions (tons/yr)	Limited Emissions Per Turbine (tons/yr)
1,3 Butadiene	4.300E-07				
Acetaldehyde	7.800E-05	1.857	0.464	0.205	0.051
Acrolein	7.600E-06	0.181	0.045	0.020	0.005
Arsenic	4.800E-08	0.001	0.000	0.000	0.000
Benzene	1.400E-04	3.333	0.833	0.368	0.092
Cadmium	8.300E-07	0.020	0.005	0.002	0.001
Chromium (VI)	1.300E-06	0.031	0.008	0.003	0.001
Ethylbenzene	2.400E-05	0.571	0.143	0.063	0.016
Formaldehyde	3.333E-03	79.366	19.841	8.752	2.188
Lead	1.600E-05	0.381	0.095	0.042	0.011
Manganese	1.600E-06	0.038	0.010	0.004	0.001
Mercury	4.300E-07	0.010	0.003	0.001	0.000
Napthalene	1.400E-04	3.333	0.833	0.368	0.092
NDMA	2.200E-07	0.005	0.001	0.001	0.000
NMOR	2.200E-07	0.005	0.001	0.001	0.000
PAHs	1.800E-04	4.286	1.071	0.473	0.118
Propylene Oxide	2.900E-05	0.690	0.173	0.076	0.019
Toluene	1.200E-04	2.857	0.714	0.315	0.079
TMA	1.700E-07	0.004	0.001	0.000	0.000
Xylene	2.600E-05	0.619	0.155	0.068	0.017
TOTAL		97.60	24.40	10.76	2.69

Methodology

Emission Factors are from AP-42 (05/98 draft), Table 3.4-1.

Emissions (tons/yr) = Heat input rate (MMBtu/hr) x Emission Factor (lb/MMBtu) * 8760 hr/yr / 2,000 lb/ton

 $Limited \ Emissions \ (tons/yr) = Heat \ input \ rate \ (MMBtu/hr) \ x \ Emission \ Factor \ (lb/MMBtu) \ ^* \ 966 \ hr/yr \ / \ 2,000 \ lb/ton$

Appendix A: Emissions Calculations Commercial/Institutional/Residential Combustors #1 and #2 Fuel Oil

One (1) diesel fire engine

Company Name: West Fork Land Development, L.L.C

Address, City IN Zip: County Road South East 700 South, Wheatland, Indiana 47597

CP: 083-10726 Plt ID: 083-00041 Reviewer: NLJ

Date: 09/01/1999

Heat Input Capacity MMBtu/hr

Potential Throughput

S = Weight % Sulfur

kgals/year

0.4

1.6

100.114286

	Pollutant							
	PM	SO2	NOx	VOC	СО			
Emission Factor in lb/MMBtu	0.3	0.29	4.4	0.36	1.0			
		(1.01S)						
Potential to Emit in tons/yr	2.2	2.0	30.9	2.5	6.7			
Limited Potential to Emit in tons/yr	0.006	0.006	0.092	0.007	0.020			

Methodology

Potential Throughput (kgals/year) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1kgal per 1000 gallon x 1 gal per 0.140 MM Btu

Emission Factors are from AP 42, Table 3.3-1 (SCC 2-02-001-02, 2-02-003-01) 10/96

PM Emission Factor is equivalent to the PM-10 emissin factor listed in AP-42.

Emission (tons/yr) = Heat input (MMBtu/hr) x Emission Factor (lb/MMBtu) * 8760 hr/yr /2,000 lb/ton

Limited Emission (tons/yr) = Heat input (MMBtu/hr) x Emission Factor (lb/MMBtu) * 26 hr/yr /2,000 lb/ton

HAPs

Emission Factor in lb/mmBtu	Benzene	Toluene	Xylene	Propylene	Formaldehyde
	9.3E-04	4.1E-04	2.9E-04	2.6E-04	1.2E-03
Potential to Emit in tons/yr Limited Potential to Emit in tons/yr	6.538E-03	2.866E-03	1.997E-03	1.808E-03	8.269E-03
	1.94E-05	8.51E-06	5.93E-06	5.37E-06	2.45E-05

HAPs (continued)

This o (continuou)							
Emission Factor in lb/mmBtu	Acetaldehyde 7.7E-04	Acrolein 9.3E-05	1,3 Butadiene 3.9E-05	Total PAH 1.7E-04			
Potential to Emit in tons/yr	5.375E-03	6.482E-04	2.740E-04	1.177E-03			
Limited Potential to Emit in tons/yr	1.60E-05	1.92E-06	8.13E-07	3.49E-06			

Methodology

Emission Factors are from AP 42, Table 3.3-2, 10/96.

Potential to Emit (tons/year) = Throughput (mmBtu/hr)*Emission Factor (lb/mmBtu)*8,760 hrs/yr / 2,000 lb/ton

Limited Potential to Emit (tons/year) = Throughput (mmBtu/hr)*Emission Factor (lb/mmBtu)*500 hrs/yr / 2,000 lb/ton

¹ gallon of No. 2 Fuel Oil has a heating value of 140,000 Btu

Appendix A: Emissions Calculations Natural Gas Combustion Only MM BTU/HR <100

One (1) natural gas-fired heater

Company Name: West Fork Land Development, L.L.C

Address City IN Zip: County Road South East 700 South, Wheatland, Indiana 47597

CP: 083-10726
Plt ID: 083-00041
Reviewer: NLJ

Date: 09-01-1999

Heat Input Capacity MMBtu/hr 9.0 Potential Throughput MMCF/yr 78.8

Pollutant

Foliation							
	PM*	PM10*	SO2	NOx	VOC	СО	
Emission Factor in lb/MMCF	7.6	7.6	0.6	100.0	5.5	84.0	
				**see below			
Potential To Emit in tons/yr	0.30	0.30	0.02	3.94	0.22	3.31	
Limited Potential to Emit in tons/yr	0.033	0.033	0.003	0.433	0.024	0.364	

^{**}Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

Methodology

All emission factors are based on normal firing.

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu

Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (SUPPLEMENT D 3/98)

Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2000

Limited Emissions (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2000 * (962.3/8760)

HAPs - Organics

		in a Gigainee			
	Benzene	Dichlorobenzene	Formaldehyde	Hexane	Toluene
Emission Factor in lb/MMcf	2.1E-03	1.2E-03	7.5E-02	1.8E+00	3.4E-03
Potential to Emit in tons/yr	8.278E-05	4.730E-05	2.957E-03	7.096E-02	1.340E-04
Limited Potential to Emit in tons/yr	9.09E-06	5.20E-06	3.25E-04	7.79E-03	1.47E-05
		HAPs - Metals			
	Lead	Cadmium	Chromium	Manganese	Nickel
Emission Factor in lb/MMcf	5.0E-04	1.1E-03	1.4E-03	3.8E-04	2.1E-03
Potential to Emit in tons/yr	1.971E-05	4.336E-05	5.519E-05	1.498E-05	8.278E-05
Limited Potential to Emit in tons/yr	2.17E-06	4.76E-06	6.06E-06	1.65E-06	9.09E-06

Methodology is the same as page 1.

The five highest organic and metal HAPs emission factors are provided above.

Additional HAPs emission factors are available in AP-42, Chapter 1.4.